UNITED STATES DISTRICT COURT United States District Court Southern District of Texas FILED

U

NOV 1 2 2008

SOUTHERN DISTRICT OF TEXAS

HOUSTON DIVISION

Michael N. Milby, Class

UNITED STATES OF AMERICA	ş	11-08-
	§	CRIMINAL NO.
v.	§	
	§	18 U.S.C. § 38
RICHARD J. HARMON,	§	18 U.S.C. § 1001(a)

Defendant.

INDICTMENT

THE GRAND JURY CHARGES:

INTRODUCTION

At all times material to this Indictment:

The National Aeronautics and Space Administration ("NASA") was an agency of the
 United States government responsible for the nation's public space program.

A. International Space Station

2. The International Space Station ("ISS") was a science research facility that traveled in orbit approximately 200 miles above the surface of the Earth at a speed of about 18,000 miles per hour. The ISS was a joint project of NASA and the space agencies of Russia, Japan, Canada and eleven European countries.

B. Space Shuttles

- 3. Space Shuttles were manned space vehicles operated by NASA that blasted off like rockets and landed back on Earth like aircraft.
 - 4. Space Shuttles and their component parts were subject to extreme aerodynamic stress

on liftoff and on return from space. Failures in Space Shuttle parts could lead to disasters. The danger of catastrophic failure was real. Of the five Space Shuttles ever flown, two (Columbia and Challenger) were destroyed in flight, resulting in the death of fourteen astronauts and the loss of billions of dollars.

C. Passive Flight Releasable Attachment Mechanism Interface Plate ("PFIP")

- 5. Space Shuttles carried cargo to the ISS. The cargo was sometimes secured to the shuttle by a device called a Flight Releasable Attachment Mechanism ("FRAM"). FRAMs functioned as follows:
 - a. The cargo was attached to an adaptor plate;
- b. The adaptor plate was attached to a removable part of the FRAM called the "Active FRAM";
- c. The Active FRAM was attached to a stationary part of the FRAM called the "Passive FRAM":
- d. The Passive FRAM was attached to a beam on the sidewall of the Space Shuttle payload bay.
- 6. When the Space Shuttle docked at the ISS in orbit, an astronaut would do a space walk into the payload bay and use tools to separate the Active FRAM from the Passive FRAM. The astronaut would hand carry the Active FRAM and its cargo a short distance through space and attach it to a spot on the outside of the ISS. The Passive FRAM would remain attached to the Space Shuttle payload bay.
- 7. A Passive FRAM included a part called a Passive FRAM Interface Plate ("PFIP").

 PFIPs were constructed from a slab of aluminum about four feet long, three feet wide and 3 inches

thick. The aluminum slab was cut to precise specifications by a computer-controlled machine, holes were drilled, it was chemically coated and screws, nuts, bolts, clamps, rivets, sockets, terminals, wires, cables, fuses and other hardware and electrical parts were added to arrive at the finished product.

8. PFIPs were subjected to violent stresses during the Space Shuttle's ascent to, and return from, orbit. They were also exposed while in orbit to the harsh environment of space including radiation and extreme variations in temperature. It was extremely important for PFIPs to be built precisely as designed with no room for error.

D. Lockheed Martin Space Operations Company

9. Lockheed Martin Space Operations Company ("Lockheed") provided space-related support services to NASA. Lockheed was responsible for the planning, preparation and integration of cargo transported on the Space Shuttle to the ISS.

E. Spacehab, Inc.

10. Spacehab, Inc. ("Spacehab"), headquartered in Webster, Texas, was a company that developed and operated space flight hardware.

F. Cornerstone Machining, Inc.

11. RICHARD J. HARMON, defendant herein, owned a small business in Alvin, Texas, called Cornerstone Machining, Inc. Defendant HARMON was an employee of Spacehab until he left in 2005 to form Cornerstone.

G. The PFIP Project

12. NASA decided to use FRAMs to secure four items of cargo to the Space Shuttle Endeavour for a flight to the ISS in March 2008. The Endeavour mission was designated 1J/A and

also STS-123. The cargo was: (a) a replacement joint for an ISS robotic arm; (b) an experiment module that investigated the effects of the space environment on certain materials; and (c) two replacement direct current switching units for power distribution to the ISS.

- 13. NASA directed Lockheed to manufacture and test four new Passive FRAM assemblies for the Endeavour flight. Lockheed subcontracted out the job to Spacehab. Spacehab, in turn, contracted with Cornerstone to build two PFIPs. (Spacehab contracted with a company in California to build two other PFIPs).
 - 14. Spacehab's purchase order to Cornerstone included the following statement:

FOR USE IN HUMAN SPACEFLIGHT. MATERIALS, MANUFACTURING, AND WORKMANSHIP OF HIGHEST QUALITY STANDARDS ARE ESSENTIAL TO ASTRONAUT SAFETY.

IF YOU ARE ABLE TO SUPPLY THE DESIRED ITEM WITH A HIGHER QUALITY THAN THAT OF THE ITEMS SPECIFIED OR PROPOSED, YOU ARE REQUESTED TO BRING THIS FACT TO THE IMMEDIATE ATTENTION OF THE PURCHASER.

15. The purchase order also included the following statement:

Any deviation from the Drawings, Specifications, Statements of Work (SOW) or other requirements specified on this PO/Subcontract must be approved in writing by SPACEHAB Buyer/Subcontract Administrator prior to shipment of the product. The Supplier/Subcontractor shall submit nonconformance approval requests to the SPACEHAB Buyer/Subcontract Administrator.

16. Finally, the following statement was printed at the bottom of the purchase order, immediately below defendant **HARMON**'s signature:

The vendor agrees to notify the Space Flight Services buyer (Spacehab) within fifteen (15) working days, in writing, when any condition becomes known that may result in a defect or affect the functionality of a product delivered under this order.

17. Defendant HARMON was aware the PFIPs were human space flight equipment for

NASA.

- 18. A Computer Numerical Controlled machine operated by a Cornerstone employee erroneously cut a sizeable gash in the side of one PFIP during the manufacturing process.
- Defendant HARMON was aware of the damage but did not inform Spacehab,
 Lockheed or NASA and did not seek authorization to repair it.
- 20. Instead, defendant HARMON arranged for a welder to fill in the gash with a weld. The welder was not certified to perform the weld and was unaware the PFIP was space flight equipment.
- 21. The gash and weld reduced the structural strength of the PFIP by approximately 40 percent.
- 22. Defendant HARMON delivered the PFIP and a Certificate of Compliance to Spacehab without disclosing the damage or weld.
- 23. Because of engineering analysis showing that PFIPs were subjected to greater stresses in flight than had previously been known, NASA scheduled the Cornerstone PFIPs for heightened inspection including "dye penetrant" testing.
- 24. A NASA engineer discovered the unauthorized weld during the dye penetrant testing.

 After further analysis, the damaged PFIP was discarded.
- 25. If NASA had used the damaged PFIP as planned to secure cargo to the Endeavour, the weld could have cracked open during flight, allowed cargo to come loose and possibly resulted in the loss of the spacecraft.

COUNT ONE (Fraud Involving Space Vehicle Parts)

A. INTRODUCTION

1. The Grand Jury adopts, realleges, and incorporates herein the allegations in paragraphs 1 - 25 of the Introduction of this Indictment as if set out fully herein.

B. THE FRAUD

- 2. It was a part of the fraud that defendant HARMON would and did do the following:
- a. fail to inform Spacehab of the damage to the PFIP;
- b. arrange for the gash in the PFIP to be filled with a weld without seeking authorization for the weld;
 - c. deliver the PFIP to Spacehab without disclosing the damage or weld; and
- d. certify that all materials and processes used in machining the PFIP complied with the requirements of drawings supplied by Spacehab when, in fact, the drawings did not call for a weld.
- 3. From on or about August 17, 2007, through on or about September 25, 2007, in the Southern District of Texas, the defendant,

RICHARD J. HARMON,

did knowingly and with intent to defraud conceal a material fact concerning a space vehicle part, in or affecting interstate or foreign commerce, that is, that a PFIP manufactured by Cornerstone for NASA had been damaged during the manufacturing process.

In violation of Title 18, United States Code, Section 38(1)(A).

COUNT TWO (False Statement)

- 1. The Grand Jury adopts, realleges, and incorporates herein the allegations in paragraphs 1 25 of the Introduction of this Indictment as if set out fully herein.
 - 2. On or about September 25, 2007, in the Southern District of Texas, the defendant,

RICHARD J. HARMON,

in a matter within the jurisdiction of NASA, an agency of the Government of the United States, did knowingly and willfully make a false, fraudulent, and fictitious material statement and representation; that is, the defendant certified that all materials and processes used in the machining of Cornerstone's PFIPs complied with the requirements of applicable drawings.

In violation of Title 18 U.S.C. Section 1001(a)(2).

A TRUE BILL:

ORIGINAL SIGNATURE ON FILE FOREPERSON OF THE FRAND JURY

TIM JOHNSON ACTING UNITED STATES ATTORNEY

By:

John R. Lewis

Assistant United States Attorney